



SEQUENCE LISTING

<110> Ray, Animesh
Golden, Teresa Ann

<120> GENE ENCODING SHORT INTEGUMENTS AND USES THEREOF

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<141> 2000-06-09

<150> 60/138,316

<151> 1999-06-09

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<170> PatentIn Ver. 2.1

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 <213> S. cerevisae

<400> 4
 His Arg Leu Arg Ile Ile Met Gly Leu Leu Val Gly Glu Leu His Gly
 1 5 10 15

Ser Leu Thr Gln Glu Gln Arg Leu Asp Ser Val Asn Lys Phe Lys Asn
20 25 30

Leu Glu Val Pro Val Leu Ile Cys Thr Asp Leu Ala Ser Arg Gly Leu
35 40 45

Asp Ile Pro Lys Ile Glu Val Val Ile Asn Tyr Asp Met Pro Lys Ser
50 55 60

Tyr Glu Ile Tyr Leu His Arg Val Gly Arg Thr Ala Arg Ala
65 70 75

<210> 5

<211> 78

<212> PRT

<213> Arabidopsis thaliana

<400> 5

Leu Val Leu Pro Lys Val Phe Ala Glu Leu Ser Met Ile Gly His Asn
1 5 10 15

Glu Met Lys Ser Ser Gln Met Gln Asp Thr Ile Ser Lys Phe Arg Asp
20 25 30

Gly His Val Thr Leu Leu Val Ala Thr Ser Val Ala Glu Glu Gly Leu
35 40 45

Asp Ile Arg Gln Cys Asn Val Val Met Arg Phe Asp Leu Ala Lys Thr
50 55 60

Val Leu Ala Tyr Ile Gln Ser Arg Gly Arg Ala Arg Lys Pro
65 70 75

<210> 6

<211> 82

<212> PRT

<213> S. cerevisiae

<400> 6

Glu Arg Leu Ser Gly Leu Cys Asn Leu Leu Glu Phe Ser Ala Thr Ala
1 5 10 15

Leu His Gly Asp Leu Asn Gln Asn Gln Arg Met Gly Ser Leu Asp Leu
20 25 30

Phe Lys Ala Gly Lys Arg Ser Ile Leu Val Ala Thr Asp Val Ala Ala
 35 40 45

Arg Gly Leu Asp Ile Pro Ser Val Asp Ile Val Val Asn Tyr Asp Ile
 50 55 60

Pro Val Asp Ser Lys Ser Tyr Ile His Arg Val Gly Arg Thr Ala Arg
 65 70 75 80

Ala Gly

<210> 7
 <211> 81
 <212> PRT
 <213> *S. cerevisiae*

<400> 7
 His Arg Leu Arg Ile Ile Met Gly Leu Leu Gly Met Ser Val Gly Glu
 1 5 10 15

Leu His Gly Ser Leu Thr Gln Glu Gln Arg Leu Asp Ser Val Asn Lys
 20 25 30

Phe Lys Asn Leu Glu Val Pro Val Leu Ile Cys Thr Asp Leu Ala Ser
 35 40 45

Arg Gly Leu Asp Ile Pro Lys Ile Glu Val Val Ile Asn Tyr Asp Met
 50 55 60

Pro Lys Ser Tyr Glu Ile Leu His Arg Val Gly Arg Thr Ala Arg Ala
 65 70 75 80

Gly

<210> 8
 <211> 82
 <212> PRT
 <213> *Drosophila*

<400> 8
 Asp Phe Leu Ala Ser Phe Leu Ser Glu Lys Glu Phe Pro Thr Thr Ser
 1 5 10 15

Ile His Gly Asp Arg Leu Gln Ser Gln Arg Glu Gln Ala Leu Arg Asp

	20		25		30										
Phe	Lys	Asn	Gly	Ser	Met	Lys	Val	Leu	Ile	Ala	Thr	Ser	Val	Ala	Ser
	35						40					45			
Arg	Gly	Leu	Asp	Ile	Lys	Asn	Ile	Lys	His	Val	Ile	Asn	Tyr	Asp	Met
	50					55					60				
Pro	Ser	Lys	Ile	Asp	Asp	Tyr	Val	His	Arg	Ile	Gly	Arg	Thr	Gly	Cys
	65					70				75				80	
Val	Gly														

<210> 9
 <211> 81
 <212> PRT
 <213> Arabidopsis thaliana

	<400> 9														
Lys	Val	Phe	Ala	Glu	Leu	Pro	Ser	Leu	Ser	Phe	Ile	Arg	Cys	Ala	Ser
1				5					10					15	
Met	Ile	Gly	Glu	Met	Lys	Ser	Ser	Gln	Met	Gln	Asp	Thr	Ile	Ser	Lys
		20						25					30		
Phe	Arg	Asp	Gly	His	Val	Thr	Leu	Leu	Val	Ala	Thr	Ser	Val	Ala	Glu
	35						40					45			
Glu	Gly	Leu	Asp	Ile	Arg	Gln	Cys	Asn	Val	Val	Met	Arg	Phe	Asp	Leu
	50					55					60				
Ala	Lys	Thr	Val	Leu	Ala	Tyr	Ile	Gln	Ser	Arg	Gly	Arg	Ala	Arg	Lys
	65					70				75				80	
Pro															

<210> 10
 <211> 41
 <212> PRT
 <213> S. pombe

	<400> 10														
Glu	Arg	Leu	Glu	Phe	Leu	Gly	Asp	Ser	Phe	Phe	Asn	Leu	Phe	Thr	Thr
1				5					10					15	

Arg Ile Ile Phe Ser Lys Phe Pro Gln Met Asp Glu Gly Ser Leu Ser
20 25 30

Lys Leu Arg Arg Lys Phe Val Gly Asn
35 40

<210> 11
<211> 41
<212> PRT
<213> Drosophila

<400> 11
Glu Arg Leu Glu Phe Leu Gly Asp Ser Val Leu Gly Phe Ile Ile Ala
1 5 10 15

Ser Glu Leu Tyr Gln Arg Arg Pro Gln Ala Arg Glu Gly Asp Leu Ser
20 25 30

Arg Met Arg Ala Ser Met Val Asn Gly
35 40

<210> 12
<211> 41
<212> PRT
<213> C. elegans

<400> 12
Gln Arg Leu Glu Phe Leu Gly Asp Ala Val Leu Asp Tyr Met Ile Thr
1 5 10 15

Arg Tyr Leu Phe Glu Asp Ser Arg Gln Tyr Ser Pro Gly Val Leu Thr
20 25 30

Asp Leu Arg Ser Ala Leu Val Asn Asn
35 40

<210> 13
<211> 41
<212> PRT
<213> Arabidopsis thaliana

<400> 13
Glu Arg Ala Glu Leu Leu Gly Asp Ala Tyr Leu Lys Trp Val Val Ser
1 5 10 15

Arg Phe Leu Phe Leu Lys Tyr Pro Gln Lys His Glu Gly Gln Leu Thr
 20 25 30

Arg Met Arg Gln Gln Met Val Ser Asn
 35 40

<210> 14
 <211> 65
 <212> PRT
 <213> Drosophila

<400> 14
 Pro Met Cys Leu Val Asn Glu Leu Ala Arg Tyr Asn Lys Ile Thr His
 1 5 10 15

Gln Tyr Arg Leu Thr Glu Glu Arg Gly Pro Ala His Cys Lys Thr Phe
 20 25 30

Thr Val Thr Leu Met Leu Gly Asp Glu Glu Tyr Ser Ala Asp Gly Phe
 35 40 45

Lys Ile Lys Lys Ala Gln His Leu Ala Ala Ser Lys Ala Ile Glu Glu
 50 55 60

Thr
 65

<210> 15
 <211> 65
 <212> PRT
 <213> Drosophila

<400> 15
 Pro Ile Ser Gln Val His Glu Ile Gly Ile Lys Arg Asn Met Thr Val
 1 5 10 15

His Phe Lys Val Leu Arg Glu Glu Gly Pro Ala His Met Lys Asn Phe
 20 25 30

Ile Thr Ala Cys Ile Val Gly Ser Ile Val Thr Glu Gly Glu Gly Asn
 35 40 45

Gly Lys Lys Val Ser Lys Lys Arg Ala Ala Glu Lys Met Leu Val Glu
 50 55 60

Leu
65

<210> 16
<211> 64
<212> PRT
<213> Drosophila

<400> 16
Pro Ile Thr Lys Leu Ile Gln Leu Gln Gln Thr Arg Lys Glu Lys Glu
1 5 10 15
Pro Ile Phe Glu Leu Ile Ala Asn Gly Asn Glu Thr Ala Arg Arg Arg
20 25 30
Phe Val Met Glu Val Ser Ala Ser Gly Ser Thr Ala Arg Gly Thr Gly
35 40 45
Asn Ser Lys Leu Ala Lys Arg Asn Ala Ala Gln Ala Leu Phe Glu Leu
50 55 60

<210> 17
<211> 73
<212> PRT
<213> Arabidopsis thaliana

<400> 17
Thr Arg Gln Thr Leu Asn Asp Ile Cys Leu Arg Lys Asn Trp Pro Met
1 5 10 15
Pro Ser Tyr Arg Cys Val Lys Glu Gly Gly Pro Ala His Ala Lys Arg
20 25 30
Phe Thr Phe Gly Val Arg Val Asn Thr Ser Asp Arg Gly Trp Thr Asp
35 40 45
Glu Cys Ile Gly Glu Pro Met Pro Ser Val Lys Lys Ala Lys Asp Ser
50 55 60
Ala Ala Val Leu Leu Leu Glu Leu Leu
65 70

<210> 18

<211> 61

<212> PRT

<213> *Arabidopsis thaliana*

<400> 18

Pro Val Arg Glu Leu Gln Glu Arg Cys Gln Gln Gln Ala Glu Gly Leu
1 5 10 15

Glu Tyr Lys Ala Ser Arg Ser Gly Asn Thr Ala Thr Val Glu Val Phe
20 25 30

Ile Asp Gly Val Gln Val Gly Val Ala Gln Asn Pro Gln Lys Lys Met
35 40 45

Ala Gln Lys Leu Ala Ala Arg Asn Ala Leu Ala Ala Leu
50 55 60